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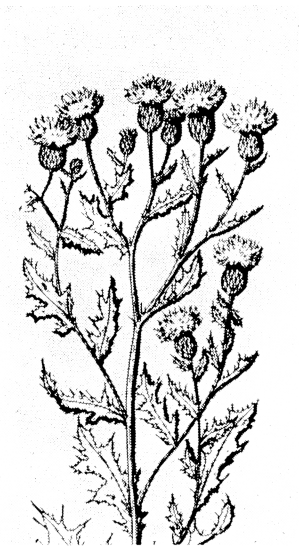

Controlling Canada THISTLE with 2,4-D

by A. L. Bakke

CANADA THISTLE is resistant to 2,4-D. Many farmers using 2,4-D have killed the tops only to see new shoots come up from the roots.

Ordinary applications of the ester, amine salt or sodium salt fail to give complete control—even a single treatment at a rate as high as 20 lbs. of acid per acre is not effective.

But tests made during the past 4 years have shown that repeated applications of 2,4-D will eradicate the thistle.

An application of 2,4-D, when the thistles are in the bud stage and most susceptible, will destroy the tops and many of the roots. For the best concentration, it's sufficient to use 1 lb. of 2,4-D per acre. That means about 2 teaspoonfuls of ester per gallon.

Mowing at the bud stage, followed by 2 applications of 2,4-D the next year, has reduced old stands of thistle by more than 90 percent. Applications during the early bud stage halt growth. Seed won't form. But it's still at least a 2-year proposition.

In small grain, it's best to use an application of 1 pt. (⅓ lb.) per acre of an ester type of 2,4-D. However, you can expect some damage to the crop if the thistles are sprayed in the early bud stage. But the damage may not be nearly so great as might occur if you let the thistles grow.

You can spray thistles in corn around the middle of June using 1 pt. per acre of an ester type 2,4-D to kill the above-ground parts. This concentration will not hurt the corn. Use drop nozzles to keep the spray from coming into direct contact with the growing corn shoots. And, with high clearance equipment, it's possible to make a second application in September.

For Non-crop Areas

In non-crop areas, you can increase the amount of 2,4-D up to 1 qt. per acre for best results. But there's no point in using more than that.

Where soil sterilization isn't important and if you want to complete the job in 1 season, you can use sodium chlorate. Apply it at the rate of 4 lbs. per sq. rd. Usually 1 application will reduce the stand about 90 percent. If a second application is made, it won't take as much solution as the first. The first treatment should be given near the middle of June and the second early in September. Make sure that all leaves are thoroughly wet with solution.

Here are some examples of the results we found in our tests with 2,4-D:

In northern Iowa, we gave thistles 2 sprayings in 1 season in pasture land. The thistle stand was reduced 70 percent. Mowing prior to blossoming, followed by a single spraying in September, cut the thistle stand 40-50 percent.

Second-year Treatment

The next year, we gave 2 more applications to the thistles treated the fall before and reduced the stand almost 95 percent!

We sprayed Canada thistles growing in oats when the oats were in the milk stage and again in the stubble. Result—a 90 percent cut in the thistle stand.

At another location, we treated a heavy stand of thistle early in July when the thistles were still in the bud stage. We plowed the area 4 weeks later. Up to November, there was no aerial growth.

So, although Canada thistle is resistant to 2,4-D, it can be used effectively if you keep at it. And, as we've said, sodium chlorate may be useful where soil sterilization isn't important.

Additional information on the control of Canada thistle can be obtained from the Extension Service or from your county extension director.

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